

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/Ala Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-010793**Date Inspected:** 04-Dec-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower and OBG Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector George Goulet was present during the times noted above for observations relative to the work being performed.

**Bay 10**

This QA Inspector randomly observed the following work in progress in Bay 10:

SMAW welding of temporary lower rotation fender located on PCMK north tower, lift 4, skin B at B/C corner between approximately 120.5M and 121.5M elevations. Welder was identified as 040491. ZPMC QC was identified as CWI Wang Chuan Qin QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-P-2114.

FCAW welding of temporary lower rotation fender located on PCMK north tower, lift 4, skin C at B/C corner between approximately 120.5M and 121.5M elevations. Welder was identified as 057244. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-T-2131.

**Bay 11**

This QA Inspector randomly observed the following work in progress in Bay 11:

SAW welding of weld joint ESTL4-2B/L-61A located outside PCMK east tower, lift 4, skin D to skin E, between approximately 129M and 132.5M elevations. Welder was identified as 040699. ZPMC QC was identified as CWI Guo Peng (QC2). The welding variables recorded by QC2 appeared to comply with WPS-B-T-2221-C-U2b-S-2.

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

Also present at this location and appearing to be monitoring the welding operation was ABF Representative Zhang Xiong.

SAW welding of weld joint ESTL4-2B/L-61A located outside PCMK east tower, lift 4, skin D to skin E, between approximately 132.5M and 136M elevations. Welder was identified as 041716. ZPMC QC was identified as QC2.

The welding variables recorded by QC2 appeared to comply with WPS-B-T-2221-C-U2b-S-2. Also present at this location and appearing to be monitoring the welding operation was ABF Representative Zhang Xiong.

SAW welding of weld joint ESTL4-2B/L-61A located outside PCMK east tower, lift 4, skin D to skin E, between approximately 138M and 141M elevations. Welder was identified as 056975. ZPMC QC was identified as QC2.

The welding variables recorded by QC2 appeared to comply with WPS-B-T-2221-C-U2b-S-2. Also present at this location and appearing to be monitoring the welding operation was ABF Representative Zhang Xiong.

SAW welding of weld joint ESTL4-2B/L-61A located outside PCMK east tower, lift 4, skin D to skin E, between approximately 141M and 144M elevations. Welder was identified as 044560. ZPMC QC was identified as QC2.

The welding variables recorded by QC2 appeared to comply with WPS-B-T-2221-C-U2b-S-2. Also present at this location and appearing to be monitoring the welding operation was ABF Representative Zhang Xiong.

### Blast Shop #4

ZPMC QC Paint Inspector informed this QA Inspector that at 2145 hours in blast shop #4 Caltrans QA Inspection personnel are requested to carry out visual inspections of surface preparation of the bottom plate in OBG segments 1AAE, 1AE, and 1BE. This QA Inspector and Caltrans QA Inspector Paul Dawson performed random visual inspections of the exterior end of OBG Segment 1AAE for a distance of approximately 1 meter as measured from the bottom of the OBG in the center and on the south side and the interior bottom plate of 1AE and 1BE between panel points 8.5 and 11. This QA Inspector also performed random visual inspections of the interior side plate on the south (bike path) side of segment 1BE from panel point 12.5 to the east edge of this segment where it will eventually attach to segment 2AE. ZPMC recently performed weld repairs of the segments splice welds and due to removal of the coatings in certain locations, ZPMC has utilized grit blast equipment to remove all the paint from the interior bottom plate in these locations and ZPMC intends to paint it a second time. This QA Inspector visually observed and marked various locations that require grinding to resolve visual shallow nicks and scrapes. The areas were marked with colored chalk and ZPMC had a worker using a grinder to remove the areas that had been marked as being visually unacceptable. ZPMC paint inspection personnel informed this QA Inspector that ZPMC is going to grit blast the interior surfaces a second time.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

As noted above.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod, 134-8257-0045, who represents the Office of Structural Materials for your project.

---

## WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---

---

<b>Inspected By:</b>	Goulet,George	Quality Assurance Inspector
----------------------	---------------	-----------------------------

---

<b>Reviewed By:</b>	Dawson,Paul	QA Reviewer
---------------------	-------------	-------------

---